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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/075,090	02/12/2002	Mark H. Delcourt	0275M-000441	7267

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EXAMINER

LE, THANH TAM T

ART UNIT PAPER NUMBER

2839

DATE MAILED: 09/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/075,090

Applicant(s)

DELCOURT ET AL.

Examiner

Thanh-Tam T. Le

Art Unit

2839

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14 and 15 is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-13 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4. 6) ☐ Other: _____

DETAILED ACTION

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3 and 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arnold et al. (5,442,133) in view of Wojciechowski (6,491,487).

Arnold et al., figures 3B and 3C, disclose an electrical connection comprising:

- an elongated stud (30) having a shoulder (34) and a patterned segment (36).

The shoulder having six substantially flat faces circumferentially located around a longitudinal axis of the stud; and

- a fastener (32, a nut) removably secure to the stud.

Arnold et al. disclose the instant claimed invention as described above except for the stud having an enlarged flange. The shoulder locating between the flange and the patterned segment and having at least seven substantially flat faces.

Wojciechowski, figure 7, discloses a stud (80) having a flange (88) and a shoulder (83) which shown as an octagonal sides (column 5, lines 50-67). The shoulder (86) locating between the flange (88) and the patterned segment (81). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Arnold et al.'s stud with the flange as taught by Wojciechowski, in order to have a space between the flange and the patterned segment.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Arnold et al.'s shoulder with the shoulder having octagonal sides as taught by Wojciechowski, in order to have more ways to angle the wire.

Regarding claim 2, Arnold et al., figure 3B, disclose the patterned segment of the stud including at least one spiral thread.

Regarding claim 3, Arnold et al., figure 3C, disclose the fastener is a rotatable nut having an internal thread operably engaging the thread of the stud.

Regarding claim 5, it is noted that Wojciechowski, figure 7, discloses the flange of the stud having a circular periphery coaxially aligned with the longitudinal centerline.

Regarding claim 6, the combination of Arnold et al. and Wojciechowski, figure 3A (Arnold et al.), discloses the stud further including a weldable segment (42, column 4, lines 56-57) located on an opposite side of the flange from the shoulder.

Regarding claim 7, Arnold et al., figure 3C, disclose the shoulder including curved portions between sections of adjacent pairs of the faces, and the faces define a polygonal cross sectional shape.

Regarding claim 8, Arnold et al., figure 3C, disclose an automotive vehicle body panel (10). The stud is a grounding stud welded to the panel (Arnold et al.'s abstract).

Regarding claim 9, it is noted that Wojciechowski, figure 7, discloses the shoulder having eight faces arranged in an octagonal cross sectional configuration.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka (5,413,500) in view of Wojciechowski (6,491,487).

Tanaka, figure 1, discloses an electrical stud comprising:

- a thread segment (25) spiraling around a longitudinal centerline;
- a shoulder (27) located adjacent the threaded segment and having six substantially flat faces surrounding the longitudinal centerline and defining a polygonal cross sectional shape;
- an enlarged flange (29) located adjacent the shoulder opposite the threaded segment. The flange being transversely larger than the shoulder and the threaded segment; and
- a securing segment (28) located on an opposite side of the flange from shoulder.

Tanaka discloses the instant claimed invention as described above except for the shoulder having at least eight substantially flat faces and the threaded segment, the shoulder, the flange and the securing segment are parts of a single metallic member operable to conduct electricity.

Wojciechowski, figure 7, discloses a stud (80) having a shoulder (83) which shown as an octagonal sides (column 5, lines 50-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Tanaka's shoulder with the shoulder having octagonal sides as taught by Wojciechowski, in order to have more ways to angle the wire.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the threaded segment, the shoulder, the flange and the securing segment are parts of a single metallic member operable to conduct electricity, since it has been held that forming in one piece an article which has formerly been formed in several pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893).

Regarding claim 11, it is noted that, figure 1, Wojciechowski, figure 7, discloses the shoulder having eight faces, which define an octagonal cross sectional shape.

Regarding claim 12, Tanaka, figure 1, discloses the flange having a circular peripheral shape.

Regarding claim 13, Tanaka discloses the securing segment having a polygonal cross sectional shape and adapted to be welded onto an adjacent panel.

Allowable Subject Matter

5. Claims 14-15 are allowed.
6. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
7. The following is an examiner's statement of reasons for allowance:

None of the reference discloses the enlarged section operably encloses/located around an outside of at least a portion of the shoulder when the nut is fully secured to the stud, in combination with the other claimed elements of the embodiments recited.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh-Tam T. Le whose telephone number is (703) 306-5711. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (703) 308-2710. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

TL.

A handwritten signature in black ink, appearing to read 'Tamle', with a long horizontal flourish extending to the right.

Thanh-Tam Le
AU. 2839.